Monitoring of Land Surface Displacements in the Territory of South-Eastern Tatarstan Using Satellite Remote Sensing Data

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1992-1995 (ERS-1 satellite data)
2006-2007 (ALOS PALSAR satellite data)

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Results

Coherence maps generated on the basis of interferometrical pairs with different time bases

Comparison of coherence maps with geographic features of the area: urbanized areas are the most promising objects for radar sensing using ERS-1

Modern vertical movements of the earth’s surface evaluated by DInSAR and relevelling data

On the left – along the line A-A, on the right – along the line B-B

Graphs of the modern vertical movements according to geodetic measurements and DInSAR 2007-2006

- according to DInSAR (05.05.1992-25.05.1993)
- according to relevelling (cycle 3-2, 1993-1992)
- smoothed DInSAR displacements curve

Earth’s Surface Displacement Maps Generated According to DInSAR Data (using the images taken by ALOS PALSAR)